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THE ORGAN OF SOUND AND SENSE OF HEARING.

In my first phrenological observations from fifteen to eighteen years since, I experienced the difficulty common among phrenologists, in verifying the existence of an organ of Tune or Music. To determine the musical talent of any individual upon the Gallian system was so very difficult and uncertain an undertaking, I was compelled like many others, to regard that portion of organology as uncertain and inaccurate; and was therefore induced to look in nature for some more accurate and positive principles. I found many individuals with a prominent development of the supposed organs of Tune, who were decidedly deficient in musical talent; and having a large development myself, had never accurately learned or executed a tune. Yet as breadth of the anterior portion of the front lobe must indicate something belonging to the functions there located, I endeavored to determine what it was which might be inferred from such a development.—I observed in my own case, that although deficient as regards tunes, I was not deficient as regards other sounds, nor in the disposition to regard sound itself. On the contrary, my hearing was exceedingly alert, accurate and appreciative in reference to the various characteristics of sounds, and I had a much greater disposition than the average, to make use of the ear as an inlet for knowledge. It struck me, therefore, that a portion of the organs producing breadth of the front lobe was connected with a sense of hearing, in its general application as well as in its musical relations.

The Gallian system presented a remarkable deficiency, in having overlooked the functions of the external senses, and having made no provision for the location of those functions except in

the external organs through which they are exercised. According to the fundamental principles upon which phrenology should be based, every mental function must require a special cerebral apparatus, and cannot be performed without some such definite location. To leave the matter as left by Gall and Spurzheim, with no instrumentality for their manifestation, but the external instruments—the eye, the ear, the tongue, the nose, and the sensitive nerves, destroys the harmony and consistency of the science. For if these important mental functions can be referred solely to their corporeal instruments, other mental powers also, might with equal propriety be transferred from the brain into the body, until the whole head should be deserted by its faculties, and left as a useless mass of nervous substance; or else, a portion of the mental faculties located in the brain and another portion in the body, destroying all unity and completeness in our conception of Anthropology, and dividing the faculties of the mind between the brain and the body in a most unscientific manner.

The omission to locate the organs of the external senses in the brain was obviously an oversight, arising from the incomplete condition of the science, the difficulty of prosecuting discoveries, and the humble pretensions of its founder, who sought to be merely a faithful reporter of his observations of nature, and who did not aspire to give to his observations the systematic character of a complete and perfect philosophy. It can hardly be supposed that men of so philosophic minds as Gall and Spurzheim, would have seriously denied a cerebral location for the external senses, or consented to their confinement to their external instruments, if they had thoroughly investigated the subject. But being too busily engaged in making new discoveries, in verifying those actually made, and in the propagation of their scientific views, they did not advance so far as to ascertain the cerebral location of the senses; and these with many other important mental functions, for which they had not ascertained a definite location, were left by them as a task for their successors.

It is one of the numerous evidences of the inactivity of the spirit of original investigation and love of truth in the human race, that so striking and important a deficiency in the phrenological system should not have attracted the attention of the phrenological world; and that so remarkable a vacuity in the philosophical system of phrenology, should scarcely even have been made an occasion of a criticism, or attack. And although my own views upon this subject were announced many years since, I am not aware that they have attracted much attention; the only Phrenological Journal which has been published in our country for many years, has evinced a remarkable apathy and indifference in reference to these suggestions, as well as in reference to other discoveries calculated greatly to improve the science, and enlarge its boundaries. A very considerable

portion of the cultivators of phrenology partake of the stagnant and conservative spirit of the world in reference to scientific improvements; and although we should expect among phrenological anthropologists, the highest degree of liberality, we shall find a considerable number who have exercised all their liberality and progressiveness, in getting hold of an imperfect system of Organology, forced upon them by convincing facts, and who have no eager desire to progress much farther.

To return from this digression—it is probable that no one would seriously contend for the exclusion of the external senses from the brain. No philosophical phrenologist would seriously maintain that any portion of our mental faculties could be located exterior to the brain, in which all consciousness resides. Indeed, when I first mentioned to a very intelligent phrenologist, that I was convinced of the location in the brain of the organs of the external senses, he expressed a very confident opinion that the idea was not new, but that it had been recognized by Gall and Spurzheim. The proposition was, indeed, so self-evident to him, that he had insensibly regarded it in his own mind as a portion of phrenological philosophy—although the idea originated with him, solely in consequence of his instinctive consciousness of its truth.

To those who are not acquainted with the anatomical and physiological facts which demonstrate the certainty of a cerebral location for our senses, it may be necessary to mention that no external sense can be exercised by its apparent external apparatus alone; and that we can neither see, hear, smell, taste, nor feel, until an impression has been made upon the cerebral seats of these senses. We do not see simply by the use of the eye—by having an image formed upon the retina, which is recognized by the mind, for no idea whatever, is formed until the impression made upon the retina by the light, has been transmitted through the optic nerve into the brain. If from any point intermediate between the eyeball and the brain, the trunk of the optic nerve should be seriously compressed, vision would be disturbed, or if the compression was complete, it would be entirely prevented. If the optic nerves should be divided by the knife or by disease near their junction with the brain, leaving the whole course of the nerve and its expansion in the eye in perfect soundness, we should be utterly incapable of seeing—should be totally blind, simply because no impression would reach the perceptive organs of the brain, and consequently the act of vision could not possibly be performed by its true cerebral organ. Thus it appears that the eyes with their delicate nerves, and optical arrangements, are merely instruments for forming pictures to be recognized by the brain, as a telescope or a microscope serves to form enlarged pictures for the eye. As the telescope is to the eye which looks into it, so is the eye to the visual organs of the brain

which look into its delicate optical apparatus, through the long and delicate communicating fibrillæ of the optic nerve.

As the perceptive convolutions of the brain really perform the function of vision, assisted by making use of their external instrument the eye, it may be supposed that they would be capable of exercising the same function independent of the telescopic assistance of the eye. This is strictly true; the perceptive organs located in the brow, whenever highly excited by inflammatory conditions, or by an unusual influx of nervous energy, produce pictures of external objects as vivid and apparently real as if those objects were seen through the eye. A great number of spectral illusions and hallucinations, have originated in this manner, from an excitable and inflammatory state of the perceptive organs. Vision in these cases is perfectly performed—the objects are seen with distinct and vivid minuteness, but the vision is false, because it was not produced by light, and does not correspond to any external object actually existing. Hence, it is necessary to produce correct vision, that the cerebral perceptive organs, should have an apparatus, for the purpose of receiving correct images of external objects, in order that their vision may correspond to realities. But we will not confound the eye, the mere instrument through which we view the external world, with the true organ of vision which looks through the eyes; yet, it is not true even that the mechanical instrumentality of the eye is in all cases necessary. Vision may be accomplished with the eyes closed, by those who possess the clairvoyant faculty, and who are able to receive a correct impression of the appearance of external objects by some other instrumentality than ordinary light and the refractive powers of the eye. What has been affirmed of the eye is generally true in reference to the ear; the external sound is not heard until the impression made upon the auditory nerve has been recognized in the cerebral organ of the sense of sound. The mind is as independent of the external instrumentalities of hearing, as it is of those of vision. We may hear unreal sounds by the action of the cerebral organs, independent of the auditory nerve, and we may hear sounds truthfully, by means of the clairvoyant faculty, which brings the mind into relation to distant objects.

It is equally true that our physical sensations belong to the brain, and not to the part of the body in which they appear to occur. When we feel hunger, pain or fatigue, these sensations are recognized in the brain, and are only referred to the part from which the impressions originated. If any portion of the body be deprived of communication with the brain by the compression or division of its nervous filaments, we can no longer feel any sensation at that point. But if the divided extremity of the nerve which was accustomed to conveying the sensations of that part, be irritated or injured, we are still capable of feeling

in, which seems to be in the amputated parts, because the mind habitually refers impressions coming by that nerve to its extremities. Whether the impression originated in the flesh where the filaments of the nerves are distributed, or whether the nerve was divided, and the impression originated from its divided extremity, is obvious that in either case alike, the brain performed all the sensation, and referred the sensations to the direction in which the impression came. And even when the external source of any sensation is entirely removed, the same sensation may continue by the action of the brain. Thus, if a leg has been cut off, buried, and entirely decomposed, it is not unusual for the individual who has been mutilated, to continue to feel some of the same sensations in the limb which he experienced when his leg was in existence with all its nerves. For this and other reasons, it must be recognized as an incontestable doctrine of physiology, that sensation belongs to the cerebral seats of consciousness, and not to any corporeal apparatus. Our nerves are but an apparatus to convey impressions made upon them to the brain, which sees, hears and feels, by its own organic power. While such principles are generally familiar to anatomists and physiologists, it is rather remarkable that none should have undertaken to determine by any accurate process, the location of the various senses, which may thus be traced with unerring certainty to the brain.

That the sense of sound has a cerebral location in the external anterior portion of the front lobe, was among my earliest discoveries—confirmed by the craniological observations of a series of years, and finally demonstrated by experiments upon the brain. My attention to the true locality of this sense was first attracted by the fact, that while I could not always recognize musical ability, connected with the supposed organ of tune, I generally found acuteness of hearing, and a capacity for the recognition sounds connected with the exterior inferior portion of the front lobe.—When the organ in question was large—which the reader will observe upon my phrenological diagram, in the last number, about an inch behind the brow, in the temples, I found the individuals prompt in giving attention to anything spoken in their presence, and apt in appreciating the various tones of the voice, which they were competent to regulate with a more delicate and varied modulation than those who were deficient in the organ of the sense of sound. Another remarkable difference between those who possessed a large and a small development of this organ, was the greater facility with which the former acquired knowledge addressed to the mind through the ear. In society, they would hear everything said, and remark the intonation of the voice. In public halls they would hear every word of the lecture, without any apparent effort of attention; and in studying a foreign language, they would rapidly acquire it by hearing it spoken, and catch the peculiarities of the pronunciation; while those defec-

tive in this organ appeared not to succeed in catching the peculiarities of a foreign pronunciation, and experienced great difficulty in learning language by the ear, although they acquired it with considerable facility from books. In the American head, the organs of visual perception generally predominate over those of hearing; and hence, public audiences require to be attracted and retained by something addressed to the eye. They cannot listen with satisfaction, unless they have a distinct view of the speaker, and much of the interest of his discourse arises from his personal appearance and manner. Teachers who have apparatus, experiments, drawings, and other visible illustrations, succeed much better in interesting and controlling the attention; yet I have frequently observed in public audiences, that individuals who gave a fixed and earnest gaze, were sometimes but poor listeners; while others who gave but little apparent attention, were really very accurate in hearing and remembering everything said. The former had a large development of the visual perceptive organs of the brow, the latter a fuller development of the auditory organ in the temples. In proportion to the relative development of these two organs, is the intensity of the impression made through the senses of hearing and seeing, upon the mind. Those who have very narrow and prominent foreheads, having large visual and small auditory organs, are much more easily moved by striking sights, than by any species of sound. Bishop S., whose forehead early attracted my attention, by its remarkable visual development, projecting over the face, and the remarkable narrowness of the temples, remarked when I pointed out the disparity, that he had been a hundred or a thousand times thrilled through the frame by impressions made upon the eye, to once by impressions made upon the ear; a statement which in connection with the remarkable shape of his forehead impressed me very forcibly, as it was so remarkable a contrast with my own personal experience. Sounds always had a greater power over my feelings than visible objects.

Persons with a large development of the auditory organ are enabled to acquire much knowledge of the character and personal peculiarities, by the tone of the voice. With most persons, the features alone make the strongest impressions of character; but in my own case, the irresistible impression of one's character or emotions much more frequently arose from the voice than from the countenance. The material features appeared to be something more exterior to the mind, and not so absolutely expressive of its characteristics; while the sound of the voice appeared almost as the very spirit itself, proceeding forth from the individual. It seemed to convey the most delicate variations of thought and passion, with the most complete fullness and fairness. I scarcely felt that I knew an individual, until I heard and appreciated the tones of his voice, in which his character seemed

embodied. Not only could it express the mental power and emotions in operation at the time, but the influences of the past life—the education and early associations, would reveal themselves in the voice, rendering it a perfect embodiment of the individual character; hence, I supposed that the blind might find as perfect an expression of character in the voices which they heard, as those accustomed to rely upon the eye could possibly find in the countenance. In ordinary conversation, the words that are uttered convey but a small portion of the intelligence that is communicated. The tone of the voice conveys the spirit and meaning, and expresses a vast deal that is entirely beyond the power of language to convey, while it frequently contradicts and nullifies the apparent meaning of the words that are uttered. Doubtless a large portion of the instinctive tact with which persons of delicate organization appreciate character, is connected with the sound of the voice, rather than the play of the countenance. An accurate appreciator of character will often understand the emotions at work as indicated by the voice, better than the individual himself, who feels them.

There is no accurate method of measuring this delicacy of perception in matters of feeling, but the extent to which it can go may be illustrated by the facility with which good observers may detect the slightest influence of habit, education and society, long after the causes have ceased to operate, so as to point out in strangers, a family connection, indicated by a resemblance of voice; and to recognize persons from the same district of country by the similarity in the sound of their voices. For example, a medical professor of Cincinnati, was acquainted with a physician of the city, formerly from Bavaria. On visiting Cleveland, he entered the shop of a German barber, and as soon as he heard him speak, he recognized him as a countryman of the Bavarian physician, by the sound of his voice. Mr. Charles Cist, of Cincinnati, editor of Cist's Advertiser, well known on account of his statistical and historical researches, having a large development of the auditory and perceptive organs, has a remarkable accuracy in recognizing the peculiarities of the voice. The following narrative from a late number of his paper, Dec. 1851, furnishes so appropriate an illustration that I copy it in full.

“THE HUMAN VOICE.

“I propose to record a series of observations made in my own experience, upon the subject of the human voice, which are sufficiently remarkable, and which some one, of greater ability than myself to do so, may use for the purpose of enforcing or illustrating the philosophy or science to which they properly belong. It seems to me that they ought to lead to some practical results, although I am unable to say what these are.

"From 1814 to 1820, I resided in Harmonie, Butler county, Pennsylvania, and was engaged in business which brought me into contact with almost every resident in the vicinity. A large proportion of the farmers there—probably three-fifths—being emigrants from Ireland, principally from its northern part, I had early observed that there was a different tone in the voice of a county Down—county Derry—Fermanagh—Donegal Irishman, and after a little practice I could readily and correctly challenge the birth-place, as to county, of every native of Ireland who fell under my notice, being able to determine the fact by the voice, with equal facility, by day or night.

"After emigrating to Cincinnati, and being thrown into contact with a wide range of foreigners, English, Scots, and Irish, and a still greater variety of Americans in reference to the states they had left, I was led to notice in the same manner the difference in voice among these various classes, and was soon able to distinguish the various intonations among the English and Scots, so as readily and accurately to determine the shire from which they came. More particularly did I study the voices of my countrymen, and after rendering myself familiar with the various shades of voice which distinguish a New Yorker from a Jerseyman, or a Virginian from a Kentuckian, I progressed so far in my observations, when I met a Pennsylvanian, as to discriminate by the tone of his voice the county in which he had been raised, by noticing the effect on the voice, of a greater or less admixture of the German, or the Scots-Irish, or the Catholic Irish element in the community from which he came. Thus I had no difficulty in distinguishing a Berks county German from a Lancaster county one; a Scots-Irish emigrant from Mercer county, from the same class from Washington county; or a Quaker of Chester county from one of Fayette.

"All this seems remarkable, even to myself, and others may naturally enough doubt whether there be not as much fancy as fact in the case. I will, therefore, narrate two or three instances in which I can appeal to others as witnesses.

"In 1832, an individual was tried in the United States district court of this state, for purloining an hundred dollar bank note from the mail, and a large party of witnesses, lawyers, &c., resident here, were obliged to attend the trial, at Columbus. The direct roads hence to that city were impassable, on account of heavy rains, and a party consisting of Judges McLean and Burke, lawyers Storer and Strait, myself and some others, traveled by steamboat to Portsmouth, and thence by stage to Columbus. On the route, I undertook to designate the states from which the various individuals of the party had emigrated. In most of these instances, this was an easy effort, but one case I had great difficulty in deciding, that of a Pearl street merchant, whom I pronounced a New Englander, but could not determine the state.—

ly judgment was greeted with a general laugh from the party, he asserted that the individual in question was well known to be a native of North Carolina. I insisted, however, that he was a native Yankee, and after considerable effort to evade a direct answer to that point, the merchant acknowledged that he was born in New England, but had resided in North Carolina from the third year of his age. With one exception, the whole party is living yet, and can vouch for this statement.

"Shortly before the construction of the present railroad from Genia to Columbus, and while a line of stages connected the late metropolis with the Little Miami railroad, I left the Neil house in company with one passenger only. We soon fell into conversation, my companion, named Mc—, stating himself to be a resident of Pittsburg, and engaged in putting up pork. I said that I presumed he had not always resided there. He replied that he had, and asked me why I judged as I did. I rejoined that I should have put him down as from Carlisle, or its immediate vicinity. He laughed and confessed that he was born and had resided there the first years of his life, but that he had been so long in Pittsburg, that he had never considered himself as having resided anywhere else. He insisted on it that it was a chance hit, and nothing but a guess. 'Well, sir,' said I, 'I never traveled this road without more or less Pennsylvanians being on the stage, and if we have any this trip, I will engage to give you the nativity of each one, and you shall satisfy yourself how near I am right.'

"It was dusk when we started, and it became fully dark by the time we reached our first changing place for horses. At this place we took in of course a new driver, who, I whispered to my companion, was a Pennsylvanian, and a Dauphin county man, at that; and two other passengers, an old man and a young one, whom I heard conversing together at the stage door while the horses were changing, and on the strength of that conversation I pronounced the old man Lancaster, and the young one Schuylkill county. As soon as the stage started, I accosted the old man; 'Well, my friend, you are a Pennsylvanian, I judge.' 'Yes.' 'From Lancaster county, eh?' 'Yes!' Some questions were then put on his part, which I answered. 'But your neighbor, here, he is not Lancaster?' 'No,' said the old man, and added, 'what is he then?' 'Schuylkill, I think,' was my reply. The young man spoke up and said he was from Berks. 'Well,' I remarked, 'there is no great mistake; the two counties line each other.' After travelling a few miles, during which the two newcomers were conversing freely about buying land in Ohio, I was positive the young man was from Schuylkill. I asked him, therefore, what place in the county he lived in were the courts held in. He replied, Orwigsburg. 'Well, then,' I replied, 'I was right. You belong to Schuylkill county, for Reading is the county town of Berks.'

"We took in only one passenger more, who, after considerable doubt, I said was a Pennsylvanian, and from some of the mountain counties, Centre, Huntingdon, or Bedford. Nearer than this I could not get. It turned out in conversation that he was a resident of Michigan, and had left Huntingdon county thirty-seven years ago.

"The driver who I had put down as a Dauphin county man, was from Hummelstown, on the Swatara, as Mr. Mc——ascertained of him, on enquiry, as he was leaving the stage.

"Mr. Mc——, who still resides in Pittsburg, will doubtless recollect our stage trip, and can vouch for the truth of these statements.

"I have frequently challenged persons by the voice, as belonging to particular families, of which I knew other members. The latest instance of this occurred on a visit I made two or three years since, to Hamilton, Ohio. On the seat at the door of the hotel at which I put up, I saw a gentleman conversing with Mr. McBride, clerk of the Butler county court. As soon as a pause occurred in the colloquy, I accosted him. "Is your name, sir, not Wade?" He replied that it was, but that he had not the pleasure of knowing me. I gave my name, and explained that I knew him only by the voice, and that had I met him in the most distant part of the world, I should have known him to be one of the Wade family of Cincinnati. This is not a solitary instance of the kind.

"What makes this more remarkable, and puzzles me in all attempts to work out the problems in philosophy which these incidents help to make, is that I am far from having an accurately musical ear, and am slow to acquire a tune, although passionately fond of music of the simple and natural style.

"Perhaps these facts may be of service to some one who understands the philosophy of the subject better than I do, and who can use them as illustrating laws of nature of which I am ignorant."

SPEED OF THE MAGNETIC CURRENT.

A long experience of the Coast Survey with some dozen different lines of telegraph, establishes the fact that the velocity of the galvanic current is about fifteen thousand four hundred miles per second. The time of transit between Boston and Bangor was recently measured, and the result was that the time occupied in the transmission, was one sixteen thousandth part of a second, and that the velocity of the galvanic current was at the rate of sixteen thousand miles per second, which is about six hundred miles per second more than the average of other experiments.—*Exchange.*

NEW DISCOVERIES—THE AURA-TEST—ODOMETER— MAGNETOSCOPE, &C.

I have received several communications from correspondents who have been engaged in repeating the experiments with the odometer mentioned in this Journal. My correspondents are quite sanguine in the opinion that they have discovered and demonstrated very important laws of nature, and have proved that **MIND CAN ACT ON INORGANIC MATTER**, by a direct effort of the will, which is one of the most important and interesting propositions that could be added to our existing stock of knowledge. It would seem really that if spirits can *rap* when out of the body, they ought to be able to do as much before leaving the body.—Why not? I would invite the careful attention of my readers to the discoveries of my correspondents, and, also, to the report of similar discoveries in England. After reading which, they will be prepared to consider my own statement of the apparent philosophy of these phenomena.

The name suggested by my Illinois correspondent, of *Aura-test* is better than either of the terms "*Odometer*" and "*Magnetoscope*," as the experiments are really a test of the *aura*, or influence which appertains to the nervous system.

LETTER FROM A LADY OF ILLINOIS.—"Dec. 18—Yesterday I received your Nov. Journal. The article on Od Force much attracted my attention, reminding me of something I discovered, or rather *thought* I discovered nearly a year ago. But, to-day, or more properly speaking, *yesterday*, I began, in the evening, to try experiments—experiments which lured me on through midnight to morning, and now I will, before retiring, give the result according to my convictions.

1. The relation which man stands to the earth (and outward universe also) causes the rotations and vibrations of the odometer to be affected by his position as to the points of the compass. With me the experiments 20 and 21, on page 4 of the Journal, resulted as here given, when tried by a *male* facing north or south; but with a woman, when she varies her position to the different points of the compass, the changes of movement are such as given here.

[The drawing here given shows that, when the individual faces north or south, the vibration is in the north and south line; when she faces east or west, the vibration is on the east and west line; when facing the intermediate points, those on the western side produce rotations like the hands of a watch: those on the eastern side produce rotations in a direction opposite to those of the hands of a watch.—ED.]

When a male holds it the vibrations and rotations change places.

Held over inferior animals, I discovered a diagonal vibration; from north-west to south-east over females; from north-east to south-west over males.

Suspended over *both* male and female, the blended aura gives rotary motion to the odometer. My odometer was a pair of steel-pointed dividers. I like this odometer better than any other tried. I am disposed to call the acting essence "aura," and the odometer an "aura-test." Sex ascertained by suspending over a footprint—that of males taking a longitudinal motion from north to south—females the same motion from east to west. The aura-test seems to play more freely when the experimenter faces the north. Tried experiments, to see if the aura arising from a manuscript could be made perceptible to the senses; tried an innumerable quantity of various manuscripts with the *greatest success*—could test the sex of the writer with no difficulty, the manuscripts of males giving the north and south vibration, females the east and west; both together, a circle more or less perfect, according as the force of character of the two assimilated. Manuscripts 54 years old gave as brisk a vibration as those of yesterday.

My father was much interested in these manuscript experiments—the aura-test does not play so freely with him. He would seem to paralyze many, so that there would be but a trembling of the suspended steel. He thought it was because he espoused the writers. When father had tobacco in his mouth there was no vibration, but on removing it the aura-test would gain play. When father suspended the steel over tobacco, there was a brisk rotary movement; but, if I or any of my brothers tried it in the same position, the poor aura-test stood and trembled with disgust. Hardly had the rest of the family retired for the night, when I hastened to get my Charles' letters, in order to test them. It has been my custom, ever since he left me, to go to his grave, and frequently write letters to him there. I receive happiness and benefit from so doing; and in taking his letters from their deposit, I also took my roll of these spirit letters of mine to him. Feeling a hesitancy to test his letters, notwithstanding my most earnest desire to do so, I took up this roll, and suspending my odometer over it, discovered the movement was a *circle*. Ah, that moment of intense rapture! I quickly sprang to the conclusion (since I had not before discovered a circular movement over manuscripts, excepting from the blended aura of male and female letters,) that his spirit was with mine when I wrote these letters, and you can imagine my feelings. But on testing his letters to me, I found that, without exception, his letters gave the circular movement too, only contrary to mine; mine revolving *against* the hands of a watch, and his *with* them. Then I concluded that the loving and friendly sentiments perhaps gave the regular movement to the aura; and I went over other letters,

holding the test close to the paper, sentence by sentence, and the aura would give the circle over all those passages where the kindly feelings were in immediate action, in other places the longitudinal movement was given as before. Over an ordinary letter, when I held the steel so as to be suspended, say three inches above the manuscript, the motion was that longitudinal & transverse one, which merely gave the sex; but all letters actuated by the enthusiasm of love, even at that height of the aura-test, still gave the male or female circle.

Charles' disease was consumption, but his death was immediately caused by the rupture of an artery. He died *alone!* and his body was found extended on the ground, bathed in blood within sight of the house where I sat expecting him. A boy first found him—wild with fright, he dashed up to the house (he was on horseback) with these words, "Charles is dead!" I was the first one who reached the spot! The dress I had on at that time is still covered with its unwashed blood-stains. It is two years last August, since it was thus stained, but the aura-test still gave the male vibration to that blood. I sacredly preserved everything about his person; and, among the articles was a little piece of paper found in his breast pocket, bearing the mark of his bloody thumb, doubtless given when searching there for his handkerchief in that dreadful moment. I took this paper from his pocket and wrote on it, previous to putting it carefully by; the stain on this paper, too, gives the male movement to the aura-test, while my writing close by produced the circle.

Dec. 19.—To-day, I found that all stimulants gave an aura which produced the same vibration as that peculiar to male manuscripts—while sedatives gave the female. Over poisonous substances, there is more or less of a trembling paralyzation. I tried a very pretty experiment thus: I wrote a word with my right hand, and wrote it again with my left hand, and then with both hands. My right hand writing gave the female movement; my left the male; both together the circle. I could tell, by the test, what sex last occupied a seat or bed;—circles over the clasped hands of two individuals. Experiment where the aura-test is suspended over the head of a subject, while the operator stands behind, both facing to the same point of the compass—the movements are the same as when the test is suspended on the right fore-finger of the subject. It is interesting to see how the action of the steel is increased by others of the same sex as the subject touching his person.

I begin to think I have discovered a key to the cause of the "rapping" phenomena. I told father so: he says he does not doubt it, and thinks, through a knowledge of the laws of the force, which the aura-test makes visible, that "perpetual motion may be arrived at."

Dec. 20th. To-day I discovered beyond the possibility of doubt

what I thought I found out months ago, viz., that we can *will matter*. I found I could will the suspended aura-test to take whatever movement rotary or otherwise I would. Father ridiculed the idea, said I must move my finger involuntarily, but I pressed the finger, holding the test against my forehead, so that it could not possibly move, and I could move with my will more readily than before. Father then tried it himself. He has to hold the test in his hand awhile after I have been experimenting with it, before it will move with him—after thus magnetising the steel, father found he could indeed will it, and he was convinced, while I in this discovery found an explanation of the cause why the test will not vibrate with sceptics, they involuntarily perhaps, will it not to move. I run off into a wide range of thoughts and speculations on the cultivation of the will faculty. Believe it is the magnetism of their will which makes men great—am reminded of Kossuth's adopted sentiment, "there is no obstacle to him who wills,"—think faith and will identical, and think that it was the cultivation of the will faculty Christ would teach when he says, "by faith we may remove mountains."

Tried experiments to make the aura-test move without having it suspended from the person—not satisfactory. The experiments work the same whether one is "isolated" when trying them or not. Reichenbach you remember conjectures the force is not identical with electricity at all.

I thought the aura-test played better when the end of the finger suspending it was elevated to about 60 degrees above the horizon. Is not that near the dip of the magnetic needle? Indulge in various speculations here.

The test plays more freely sometimes than others with me.—When my mind is disturbed, it does not act so well. An unembarrassed frame of mind and an empty stomach I think most favorable requisites.

Dec. 21. Notice the beautiful play of the aura-test when acted upon by the will, to change from one circle to the other. (All such experiments I make when facing the north.) The motion is first north and south for a few vibrations; then it comes round like the hands of a watch from the north, after making this circle two or three times. Sometimes when on the east side of the circle, it suddenly runs across to the west, then turning towards the south, rotates against the watch hands. And it returns to the other circle once more by running across from the south to the north, and then turning again like watch hands.

I perceive there are two great aura forces, and that they act at right angles to each other. One of them, I am convinced, comes from the north. I am not determined whether the other comes to us from the west, or falls vertically. When they act equally, they produce circles; and circles are formed when anything is created—be it a thought, a substance, or an animal. I find I can apply

this (I believe) truth very successfully to the better prosecution of my household duties, especially culinary ones. The more healthy food is a combination of the two forces, and the test over it, therefore, gives a circle. I am more than ever convinced that men and women should unite in all action whose aim is the advance of our race.

When the solitary man receives a high thought, it is, I think, reasonable to conclude that the necessary positive or negative he received in order to produce this circle, came to him from a higher sphere.

But let me restrain my pen, for it was not speculation, but the results of experiments merely I intended to communicate.

Dec. 22.—Went to-day to see my cousin, in order to ascertain the reality of my experiments. She always receives the Journal at G. some days before we do here. The aura-test plays well in her hands also: and I was deeply gratified to perceive the results of her trials of it were the same as when I held it. I tried her with manuscripts, daguerreotypes, the points of the compass, sedatives and stimulants. All was very satisfactory. After all this, I told her she could will the steel. She did so to her great delight—then informed me she had thought several times before that she could give it any movement she pleased. I found L., in her experiments previous to my visiting her, had also discovered the test played better when she faced the north. She had also discovered that one of another sex could change the movement, by merely touching her person with a long wooden rod, and that distance made no perceptible difference. She had never thought of trying manuscripts; but when her experiments had been the same as mine, she had arrived at like results.—When one of opposite sex touches the person holding the aura-test, if the holder *wills*, the contact will not change the motion as usual.

Dec. 23.—I make no further discoveries with the odometer—feel a strange desire to give you some of my *speculations*, but forbear. My mind is still occupied with circles, and the earnest desire to know from whence these two forces come to us which form them. I have long thought the Deity was a Universal Spirit, rather than an individualized being; and I find myself wondering if these two forces may not be his attributes—Himself. But since I have given what I consider the most important of my *experiments*, I break away from the subject, for I ought not to intrude upon you anything which I am unable to prove.

But one thing I think these experiments satisfactorily make evident, viz: that in every individual, male or female, both stimulant and sedative forces act—that when one is well, their action produces that circle in the bodily atoms we call 'health'—that disease is a disturbance or inactivity of one of these forces; and the action of judiciously applied stimulants and sedatives may restore the circle again.

P. S.—I thought I discovered that *colors* affected the aura-test; but I was not satisfied, because I came to this conclusion after I found I could will the test; and therefore I was not always sure but my will affected its motion. I have proceeded all along through these experiments with great caution. I have endeavored that my enthusiasm and my imagination should be restrained, so as to keep me within the bounds, not merely of fact, but of *evident* fact.

SECOND LETTER FROM THE SAME, JAN. 17, 1852.—You have doubtless received my letter mailed Christmas—also one from L., forwarded since, containing statements of some of our experiments on the Odic Force.

I thought from the natural point to which all who were stimulated by your article on Od Force would send the result of their investigations—that receiving such, you would have them so tested that the true would be sifted from the false; for many of your readers beside L. and myself have but limited opportunities of testing our experiments, by trying them in the hands of a *great number* of different individuals, and have thus, I doubt not, in some cases received for truth what if further tried might prove ill grounded.

I hoped you would be the first to present the public with the discoveries on this new force, and that, therefore, it would be done in a careful and scientific manner. I believe L. shared with me in this earnest wish.

But yesterday, the St. Louis daily Republican, of Jan. 5th, fell into my hands; and lo! an article headed “Spiritual Communications—Odic Force,” which was forwarded to that sheet by W., her father.

“The Odic Force can be readily tested by any one. Almost any substance will answer the purpose; but a pair of gold ear-rings, or a piece of steel two or three inches long, *suspended by a string from the first joint of the fore finger*, with the elbow resting upon a chair or table, will show the power. Let the person face to the North, and the instrument will begin to vibrate. The motion that it takes is usually north or south, but not always so. In some hands it vibrates strongly, making an angle of nearly forty-five degrees with the horizon, but in most cases it is less. Placing mineral or vegetable poisons beneath it paralyzes the motion. A single Homœopathic pellet of nux arrests the motion—so of sepia, the two-hundredth potency. Tobacco in the mouth of the operator, or snuff in the nose, arrests the motion. Over some substances it takes a transverse motion—over others a rotary motion. Manuscript affects it, and in some instances very actively. The manuscript of a deceased friend giving it vitality that was perceptibly diminished in the hand of a stranger. Touching different organs of the brain changed the motion. The intellectual

organs giving increased activity and diversity to the motion, whilst over the organs of crime it becomes paralyzed and motionless.

"But the most astonishing discovery relative to this power, and which is original here, and so far as I know, before undiscovered, is, that *it can be controlled by the will*. The mental command that it shall abandon a state of rest, and take a forward, transverse or rotary motion, or that it shall return from any motion to a state of rest, is promptly obeyed; and as soon as the effort of the will ceases, the odometer returns to a state of rest, or to its natural and spontaneous action. This fact need not be doubted, for it is in the power of any one to prove it.

"Many of us have seen, or have imagined that we saw an astonishing influence exerted upon the animal frame by mesmerism; but here we have an immediate and incontrovertible evidence of the *power of the will over inanimate matter*! This fact is the more valuable, because open to the practical experience of all, both "the learned and the unlearned," and must prove an important aid to physical science, to say nothing of spiritual or of psychological investigation. I have made an experiment with a bar of iron weighing ten pounds, which took the north and south vibration spontaneously, and then obeyed my mental call for a rotary motion without the delay of one second. The weight and magnitude of the body which may thus be set in motion, are probably illimitable." W.

LETTER FROM L. W.—You have probably, ere this, learned from my cousin, the interest which the article on the newly discovered Od force, in your last Journal has excited in our minds. We, or at least I, have been so deeply absorbed in the subject that I have thought of little else for the last two or three weeks. It opens so illimitable a field for thought and imagination that the mind is lost in the effort to comprehend its immensity. Even were there no more discoveries to be made in it, it would still be productive of great good, for these are experiments which any or every one can prove. Many who cannot be made to understand and believe anything that is not made evident to their senses, will in making these experiments, see and feel the dark cloud of doubt which has shut out from them the invisible world, suddenly dissipate, and forever. Upon the minds of several in our immediate neighborhood, to whom the subject has been broached, and who are naturally very skeptical upon such subjects, a beneficial effect has already been produced.

But the rapid development of the laws which govern this force, and the nature of the discoveries made, seem to indicate that science and especially human science is to receive from it new light, and that it may be applied at a future day to some practical use. It is in the full belief that this will be the case that my

cousin and myself are prosecuting our investigations. It is quite probable that you or some of your correspondents may have made the same discoveries, but as there is a possibility that they may be new to you, I beg leave to submit the results of my experiments.

My cousin tells me that she has given you an account of our observations up to the date of her last letter. Since comparing notes with her, my experiments have been based principally upon the following ascertained facts, 1st. the odometer when suspended over stimulants takes the longitudinal vibration, over sedatives the transverse motion, and over the deadly poisons is entirely paralyzed. 2d. When suspended over the manuscript of a male, the vibrations are longitudinal, and over that of a female transverse. Manuscript expressive of affection or of benevolent feelings produces a circular motion. In my experiments I am generally careful to face one of the cardinal points. If the intervening points are faced, the result will be a circular motion, where a longitudinal vibration was obtained in the former position, and vice versa. Whilst experimenting with manuscripts, it struck me that the different regions of the brain, the intellectual and the region of affection might produce an effect upon the odometer corresponding to that of manuscript. You can imagine my delight when I found the correspondence perfect. When the odometer is held above the head of a person of my own sex, the regions of the intellect and of energy, produce the longitudinal vibration, the region at the side of the head, comprehending reverence, modesty &c., gives the transverse, and the moral region produces a perfect circle, whilst the region of hatred and fear paralyzes the odometer completely. I wished exceedingly to try a manuscript expressive of violent anger or of some of the baser passions, but unfortunately (for my experiment) possessing none such, could not ascertain whether the correspondence would be complete in this particular. There is no reasonable doubt, however, that it would be so. You, perhaps, will be able to ascertain. When suspended above the head of a person of the opposite sex, the odometer takes the circular motion at the regions of energy and the intellect, the moral region gives the longitudinal vibration, and the region of crime paralyzes as before. This fact seemed at first to set aside the idea of a correspondence between the effects of the brain and of manuscript, and troubled me not a little, till I found that if the odometer be suspended by the left hand over manuscript, the result is the same as that obtained when it is suspended from the right above the head of a male, and that if the left hand be used as the odometer hand in experimenting with the head of a male, the result will be the same as that obtained from the head of a female when the right hand is employed. These facts seem to be an additional proof, if any is needed, of the idea which I first saw advanced in your journal,

that every one, whether male or female combines two opposite sexes in his or her own person.

There exists not only this correspondence in their effects upon the odometer between the brain and manuscripts, the productions of the brain, but there appears to be a remarkable correspondence between it, (the brain) and the inanimate creation. Thus, the intellectual and energetic regions correspond to stimulants, the side regions to sedatives, and the region of crime to poisons. A stimulant and a sedative united produce the circular motion.—How will this correspond with the effect of the moral region?

The influence of medicinal substances upon the odometer is certainly very wonderful. It seems as if this little quivering piece of metal, connected with the human system but by a thread, is endowed with life, or a mysterious sympathy, and with an unerring sagacity, which enables it to detect almost instantly the nature of whatever may be brought within its sphere, and the presence of anything that might be injurious. It occurred to me to try medicines homœopathically prepared. The result was most astonishing. A single pellet of any medicine exerts as powerful an influence as one ounce of the same substance. One pellet of *Sepia* of the two hundredth potency produces entire paralysis. Having none of a still higher potency, I was not able to ascertain the exact point at which an infinitesimal quantity would cease to act. My father found that immediately after taking a dose of *Nux Vomica*, the odometer was paralyzed. By exerting his will he could move it a little, but a very little. The fact that the odometer can be controlled by the will, renders extreme caution necessary in conducting these experiments. I therefore employed another person to select the medicines, not knowing myself what they were until the trial was over. Does not this experiment prove beyond controversy, 1st that the system is operated upon through the nerves, and 2d, the power of homœopathic medicine to act in this way, and that as far as medicinal action is concerned, mere quantity is entirely unimportant, or rather that an infinitesimal dose is as potent to produce this action as many grains can be. Being somewhat enthusiastic in the cause of Homœopathy, this proof of its power has given me especial pleasure; and my enthusiasm will, I trust, be my excuse for speaking to you, in too decided a manner, perhaps, upon a system which, if I mistake not, you regard as fallacious.

Since the discovery of the power of the will, we have sometimes amused ourselves in willing against each other. One person holds the odometer, and wills it in a certain direction, while another places a hand upon the head of the person, and wills a contrary direction. Ordinarily no effect is produced, but I have been making a trial with my father, which shows the astonishing power of the will over matter, and is also an experiment in Neurology. I seated myself with the odometer, and willed it to take

the longitudinal vibration, while my father placed his hand on the top of my head, and willed it in the contrary direction. No change was produced. At my cousin's suggestion, he then placed his hand upon the organ of Pliability. The struggle was long and severe, but I was finally obliged to yield in spite of myself. I experienced afterwards the same feeling of lassitude, with slight trembling, which long continued bodily exertion occasions.

A singular fact elicited from the experiments with manuscripts is, that Od'ic force, or fluid, or whatever it may be, arising from manuscript, may be communicated by contact to metals, and probably to other substances, and affects the odometer in precisely the same manner that the manuscript itself does. I have tried gold and tin only.

We have used various substances for odometers, but gold and steel appear to be the best; and what is very strange, size and weight seem of very little consequence. My father tried an iron bar of ten pounds weight. It moved as readily and was as easily controlled by the will as an odometer of a few inches in length. There is apparently no limit to the power. Various theories have passed through my mind as to the nature of this force, but a new experiment—a new fact, puts them all to flight."

H. J. CHURCHMAN, of Baltimore, writes as follows, under date January 6, 1852:

"Some of us have been experimenting pretty extensively with the "Odometer," and unless we have mistaken a *seeming* for a *reality*, we have attained to a further development of its powers. The oscillations seem to me to be subject to the will. It will become nearly stationary—vibrate longitudinally, transversely, or in a circle, in obedience to my *will*, without any other impulse that I can discover. If this is mere conceit, I would like to be convinced of it. Please make the experiment. If this seeming is reality, it is certainly very curious, and in the hands of some of your philosophers perhaps may lead to something further."

Dr. B. A. PENN, of Camden, Carroll co., Indiana, sends the following account of his experiments, under date Dec. 25, 1851:

"Within the last five days I have been engaged in a series of experiments, which have resulted in some of the most singular phenomena I have ever witnessed; and which open a new field of investigation to the philosopher,—especially to those engaged in adding new truths to establish animal magnetism. The person principally engaged besides myself in these experiments, is Simon F. Landry, without whom I should probably have remained ignorant of the discoveries which I have made, and which I believe are original. I was led to those experiments from the perusal of the article headed Od Force, in the November number

of the *Journal of Man*; but, as some will probably read this who have not read that number, I shall give some of my experiments, and the results.

I tried several before I succeeded, and was about resigning it all, along with the balance of popular humbugs.

Experiment 1. I took a hair; to one end I attached a vial cork, and wound or looped the other end around the joint of the fore finger above the nail: so that the cork would swing about six inches. I then stood a board on end, and placed the finger on it as steadily as I could; the cork then hung about an inch over my knee. I then placed under it a round piece of glass (top of a bottle stopper;) in a short time the cork began to oscillate and describe small circles over the glass in the directions of the hands of a watch; which circles gradually became larger.—Another person then took hold of my hand, and the oscillations ceased, and the cork commenced vibrating right and left, like the pendulum of a clock. A third person was then added, when the first described oscillations were again repeated, but more rapidly or with larger circles. These experiments I varied in a great many different ways. I found that the odometer, as it is called, moved more freely for some persons than for others; I also found that taking hold of the person's disengaged hand with my right hand, changed the course of the odometer, and taking my left hand changed it another way. And taking a plate of metal in one hand, also changed it in another direction. The best subject I found, was Simon F. Landry; the odometer moved much more freely for him than any other person, and, at that time, he was slightly under my influence, by animal magnetism. After performing various experiments, I was standing some distance from him; the odometer was vibrating to and from his body (which was a natural direction,) when I remarked I would turn it north and south.

To our mutual astonishment, before I touched him the odometer changed of itself and went in accordance with my wishes. I do not recollect of ever being so astonished before in my life, I did not say anything for some moments, during which time the odometer continued to move from north to south; I then said I would turn it round with the hands of a watch—when to astonish us still more it almost instantly obeyed—I then told it to run round in the opposite direction and it instantly obeyed—I did this more than fifty times, and in every instance it went in exact accordance with my will. And sometimes Landry, misunderstood what I said as well as some others, but the odometer never misunderstood me, it always went as I directed it to go. A great many would no doubt destroy all my experiments by saying that the young man turned the odometer as I directed—that might be done and I thought at first must be the case. But I have proofs to the contrary, we had his hand and finger held by an assistant,

and a third person placed so as to make a sight post of his finger, and still the odometer went as before. But we have still another proof, I suspended the odometer from the end of my own finger, yet it would not vibrate but very slightly, I told Simon to put the end of his finger against the end of mine, he did so and immediately the vibrations commenced and were as perfectly under the control of my will as before. But another proof still, we placed the odometer on the finger of a young man, I then took him by the hand so as to run a current of electricity through him, but the odometer would not act as I wished. I then told Simon to hold his hand under the other gentleman's. He did so and the odometer oscillated as usual; we had it going on finely—when the young man's hand lagged down so that the odometer touched the glass—I told him to raise it, he did so—but let it drop again—I asked why he did not hold up his hand—he said he could not, he was too sleepy—I then looked at his eyes and discovered he was mesmerized. I have several other experiments and their results, but I will be brief. I wish you to philosophize on this subject, and let us have the result of your reasonings.”

Mr. R. R., of Newark, Illinois, writes, January 23d, as follows:

“In the November number of the *Journal of Man* is an article on the od force, from Chambers' *Edinburgh Journal*. Feeling some interest in the experiments there detailed, a few evenings since I concluded to try them, and succeeded, much to my satisfaction, in accomplishing the results as described by Dr. Mayo. In continuing my experiment on number 20 and 21, I happened, in using my fore-finger as an od subject, inadvertently to bring my thumb and fore-finger together, and found the rotary motion to continue the same as when the fore-finger alone was held up; this did not seem to agree with the theory laid down. I supposed that the effect of the thumb would be to counteract that of the finger; it then occurred to me, possibly the motion might be caused by the thought or the power of the will. I then proceeded to test it by experiment, and succeeded in producing a rotary motion, either with or against the hands of a watch, or a longitudinal or transverse, or a state of perfect quiescence, by a concentration of will, or thought, wishing or willing either of the motions; let the string be held by the fore-finger, by the thumb, or by the thumb and fore-finger together. I had tried, as an odometer, a gold ring, but found a cone made of shell-lac, as described by Dr. Mayo, to answer the purpose full as well, and more convenient. I found it not necessary to have an od subject; the motion could be produced by holding the odometer over the table, or by suspending it at a distance from the edge. I think the motion can be produced more readily by having a mark or point under the odometer, from which the direction of the motion can be more easily determined by the eye; for it seems to be neces-

sary for success in the experiment, that the eye should be placed on the odometer, and, as it were, to catch the first sign of motion, to produce it in the required direction. I have thought the motions were produced quicker by using the fore-finger as an object subject than a mark or point; and it has appeared, at times, as if there was a feeble current of air blowing upwards from the end of the finger after holding the odometer for a few seconds, causing a sudden shaking or vibrating motion to be produced, and then the desired motion would immediately commence.

I think the reason the experiments of Dr. Mayo are reproduced is, that the experimenter expects the motions, such as he describes them, to be produced, and thinking so, they follow, as a matter of course. It makes no difference whether the odometer be suspended from the fore-finger or thumb, or if they be held together; it acts equally well. I was not certain at first but the motion might be produced by a motion of the hand, given to it by the impulse of the mind, but I have convinced myself of the truth of the phenomena, by placing some article on the table, against which I could lean or bear my hand to steady it; yet still the same effect was produced. There is no voluntary motion of the odometer in my hands, and the cause, no doubt, of Dr. Mayo's difficulties in his first investigations arose from an uncertainty in his mind of the motions to be produced. When he had settled in his mind the motion attending a certain combination, the effects were uniform. I give you my experience and the facts, and shall leave speculations alone. I sincerely hope that you receive sufficient encouragement for the *Journal of Man*. I should not know how to do without it."

Mrs. A. T., of New York, writes, January 28th:

"There is another power in the 'oscillations of the odometer,' which is not alluded to in the article upon the 'od force' in your November number, taken from Chambers' *Edinburgh Journal*—namely, the action of the *will* upon the odometer—powerful to reverse the natural movement of it. Last winter I was shown the experiment of suspending a ring in a tumbler, and having it strike upon its side the hours of the day; which it did correctly.

I concluded that, as I *knew* the time of day, it must have something to do with the mind. I commenced willing it to strike, and found that I could attain any number; and then changed the oscillating motion to a circular one, &c., &c."

Dr. Madden, Dr. Quin and others, have brought forward this subject in England, and late English papers give the following report of experiments with what they call the *MAGNETOSCOPE*:

"A gentleman, Mr. Rutter, of Black Rock, Brighton, has recently invented a magnetoscope of such extreme delicacy, that it is capable of indicating plainly to the sight the existence of

magnetic currents which would appear to be constantly traversing the human frame, and the various modifications of them which are produced by circumstances apparently of a totally insignificant character—such even as contact with the dead objects and living people around us.

The invention of the instrument is undoubtedly Mr. Rutter's, so far as it is an invention at all. However, many of the phenomena produced by the apparatus, and the principle of the arrangement, were introduced to the notice of the English public several months ago, by Dr. Mayo. No doubt many who read his work thought too contemptuously of the apparently fabulous phenomena there said to be producible, to take the trouble of putting the matter to the test of experiment, even though nothing was required, if I remember right, than to string a gold ring on a silken thread, let it hang loosely and freely from the human hand, and watch the results. In this form, however, it was a mere toy. Mr. Rutter has made of it a philosophical instrument.

The following account is drawn up from notes taken at a lecture on the instrument given in London, by Dr. Madden, of Brighton.

1. From a stand fixed firmly to the table there rises perpendicularly a rod of wood, say eighteen or twenty inches high, having a brass knob on the top. From the knob projects at right angles with the upright, a brass arm, say nine inches long, tapering to a fine end.

2. A fine silken filament is attached to one end of a small spindle-shaped piece of sealing-wax like a fisherman's float—but the shape is not material. This is hung from the extremity of the brass arm—and the line being merely a raw thread taken from the cocoon, there is no twist or tendency to turn in it, but the plumbob hangs free to vibrate or circulate, or adopt any motion in obedience to the infinitesimal influences which are to act upon it.

Immediately underneath the centre of the bob is a small circular wooden plate, say four inches in diameter, so made as to be fixed in a horizontal position, higher or lower: that is, nearer to, or farther from the lower point of the bob. On this is placed a glass dish, rather less than the tablet it rests on, and about as deep as the bob is long. The tablet is then moved upwards until the lower end of the bob *almost* touches the centre of the glass dish. The bob, thus hanging down into the dish, is protected from the accidental movements of the surrounding air. If thought desirable, however, the whole line and bob can be surrounded with a glass shade, such as are placed over artificial flowers or small statuary, having a hole in the top for the string to pass through.

The apparatus being thus prepared, and the sealing wax bob hanging dead from the brass arm, and all parts at rest, the ope-

rator placed the finger and thumb of his right hand upon the brass knob, and almost without any perceptible interval the bob was evidently moved; in a few seconds it was decidedly making an effort to swing round, and in less than a minute was steadily careering in a circle parallel to the sides of the glass dish, the lower end of the bob tracing a circle of perhaps two inches in diameter, or the size of a crown piece, from left to right, as the hands of a watch move. The lecturer said he would call this the *normal* motion, being that which was invariably produced, at least after some practice; but it was a curious fact, and as yet unaccountable, that many of the movements were different with different individuals; that they were often even different with a given individual on first experimenting and after considerable practice; but that there came a time when an operator could depend on the movement peculiar to himself occurring without exception. This left-to-right movement invariably occurred, however often the experiment was made, the bob invariably beginning to swing with the sun a few seconds after the application of the finger and thumb to the knob. He stated, too, that many experiments which at first were difficult, or gave dubious results, became sure and unvarying as the operator increased in delicacy by practice.

The mode of stopping the movement is by taking a piece of bone in the left hand, when the motion gradually slackens and ceases. With Mr. Rutter the bob will stop almost immediately, but with Dr. Madden the time occupied is tediously long, and therefore, more forcible means were, on the present occasion, employed when it was wished to commence a new experiment. The lecturer, however, showed an equally satisfactory experiment. Placing the finger and thumb of the right hand to the knob, and holding a piece of bone in the left, no movement whatever could be produced: on dropping the bone from his palm, the bob was instantly *stirred*, and in a few seconds once more traced out the normal circle.

When only the *finger* was applied to the knob, the bob set up, not a circular, but a to-and-fro movement, like a clock pendulum. On stopping it, and applying the thumb only, a similar pendulation was produced, but in a direction directly across and perpendicular to the former. The direction of the swing for finger and thumb respectively, was always the same, however often the experiment might be tried; that is, calling the direction for the finger north and south, that for the thumb was east and west; and if, while the finger was producing the north and south swing, the thumb was substituted, the bob was instantly affected—staggered, so to speak—and shuffled itself into the east and west direction.

While the lecturer held the knob by his finger and thumb, a person standing by touched the operator's left hand with his own right, when, instead of a circular motion, an oscillatory one was

produced, but in a direction different from the other two. On this, a chain was formed by the gentlemen present joining hands, and as the chain increased, the arc of oscillation increased until the bob swung as far as the sides of the dish; the contribution of a few more hands, and it must have struck the glass. If the bystander touched the experimenter with his finger (index) only, the same effect was produced as if the experimenter touched the instrument with his finger only, and so with the thumb.

Now came an extraordinary and mysterious part of the subject. The lecturer stated that if, while the operator's finger and thumb were producing the left-to-right movement, a woman were to touch his left hand, the bob would immediately refuse to proceed in the normal direction, and be carried round in the opposite direction—right to left. No ladies were present, but the lecturer stated that anything which had been worn or carried about by a female for a length of time, or even a letter written by one, would do as well. Incredible as this may seem, it was put to the proof and succeeded. The instrument being at rest, the operator placed his right hand on the knob, and a letter written by a lady was laid in the palm of his left, when the bob immediately commenced a circular movement from right to left. This was tried with several documents, one of which was of the date of September 26th, twenty-four days previous. One of these experiments was startling, and touches on a disputed and much-vexed question; but we may venture to state what really occurred. One letter placed on the hand produced an apparent indecision on the part of the bob to such an extent that the lecturer "gave it up;" he could not tell what sex the writer was. It proved to be a woman; but the writing had been penned while in the mesmeric sleep, on which the lecturer remarked, that Mr. Rutter had already ascertained the fact of the disturbing influence exerted by a somnambulist.

The remainder of the experiments were performed with a particular object, as it was imagined that the phenomena now first exhibited had an important bearing upon the homœopathic law and practice of healing. But the interest of the experiments is not confined to those who have this in view; and the most anti-homœopath, at all events, must be indebted to the heterodox practice for the means of performing some of the most curious of all the experiments—means unattainable elsewhere, and which were provided for a purpose altogether different from the present, and therefore all the more beyond suspicion. We allude to the homœopathic globules, attainable in any quantity from the chemists. These are simply little pills of white sugar, over which has been poured a tincture of that medicine with which it is desired to saturate them. The tincture may be of any potency or dilution, and the globules are named accordingly. Thus, a drop of the strong, original, or mother tincture, say of belladonna, is di-

luted and thoroughly mixed with ninety-nine drops of fluid.—One drop of the mixture is taken out, and of course contains a 100th part of a drop of belladonna. This is diluted and thoroughly mixed with ninety-nine drops more of fluid. One drop of this mixture is taken out, and of course contains a 100th part of a 100th part of a drop of belladonna—that is, the 10,000th part of a drop. This is diluted and thoroughly mixed with ninety-nine parts more of fluid. One drop of this mixture is taken out, and of course contains the 100th part of the 10,000th part of a drop of belladonna—that is, the 1,000,000th part. Suppose this process proceeded with to the twelfth, or still more, to the thirtieth time, and it may be understood how many were impressed with the idea that a drop of such a preparation could not possibly contain any appreciable quantity of belladonna,—certainly none that could act, for good or ill, on the animal economy. But these preparations are gross and material compared with the dilutions or potencies often resorted to, where thirty is left behind, and the chemist manipulates up to the hundreds, and even thousands.—No wonder that men poh-pooed, and declared that in a drop of such a fluid, and still more certainly in a globule of sugar moistened with a very small portion of such a drop, there could be no belladonna at all.

With globules of this character the lecturer proceeded to experiment.

First placing his hand on the knob, a few globules of pure sugar were placed on his left palm; but no effect whatever was produced by the sugar, the direct circular movement taking place as usual. For the sugar was then substituted one globule of sulphur, 30th dilution, and the motion was at once reversed. In consequence of a question from a gentleman present, as the lecturer was about to proceed with a new substance, he made the following curious statement: that he had been trying the magnetoscope with gold, and it struck him as strange that the gold ring on his left hand appeared inert, while that which he held acted. But on putting by the ring for a short time, it was found to influence the instrument like any other specimen. He had found, too, a similar difference with newly-adopted garments and such as had been long worn—as though articles in time became saturated with an individual's electricity, and became part of himself.

A globule of the 20,000th and another of the 65,000th sulph. produced no effect; but one of the 7000th acted immediately.

A trituration was then tried. One grain of arsenic had been rubbed down with ninety-one grains of sugar-of-milk. A small portion of this was placed on the left palm, and caused the plumbob to stop; but on a bone counter being also placed on the palm, the normal movement from left to right ensued, as if nothing had been there. It will be remembered that the effect of the bone is to stop the circulation of the plumbob, and that of

the arsenic is also to stop it. The arsenic alone succeeds in doing so ; yet when the effect of the bone, *in the same direction*, is added to it, they nullify instead of assisting each other, and the influence of the right hand is exerted as if the left held nothing at all. This is certainly curious, what ever we may think of its bearing on the homœopathic dogma, '*similia similibus curantur*,—of which more anon.

A globule of arsenic of the 40,000th dilution was tried, and stopped motion.

On placing a globule of bryonia (20th) in the left palm, a pendulum motion was produced in a line running north-west. Calcareo-carbonica produced a north and south pendulum ; iodide of potassium a north-east ; muriate of ammonia, an oscillation in a long, narrow ellipse lying north and south ; sulph. and mercury both give a *reverse* circular motion.

Be it remembered, 1st, That, however the direction and character of these movements altered, yet they were invariably the same for the same substance—insomuch that the operator having one of the globules taken at random from any box, placed by a bystander on his left palm, could, from the figure described by the bob, and its direction, pronounce what medicinal substance the sugar contained ; 2d, That the vibrations here spoken of were not mere incipient agitations of the bob, to which a wish to believe gave positive character, but *bonafide* swingings to and fro, so that the arc described by the lower end of the bob was perhaps more than two inches long.

It will be seen that this new branch of magnetology, though here shown in more or less connection with homœopathy, and with what has hitherto been known as animal magnetism, has no necessary dependence on these proscribed subjects ; neither are there the difficulties of proof, and the apparent openness to fraud, and the consequent disinclination of many to experiment, which attend the latter. The opponents of these systems are apt to regard everything which succeeds as a collusion or an accident, and every failure as a damnatory proof ; and the repugnance even to experiment is extreme. Here the student may acquaint himself with phenomena as curious, and at first thought as incredible, as any that have aroused the indignant incredulity of the wise, jealous for the honor of the human intellect and the dignity of the established authorities—phenomena produced by the unassisted experimenter, consisting in gross, material movements, leaving no room for delusion or illusion."

The foregoing statements are not only interesting and curious, but appear to indicate discoveries of the highest importance. So great a number of seemingly harmonious and curious facts, cannot be entirely devoid of instruction ; but what they indicate, must be ascertained by a more thorough examination than the facts

have as yet received. In the American experiments, it is to be observed that the odometer, or aura-test, was always suspended from the person of the experimenter, which connection was supposed to be necessary, for the purpose of rendering it sensitive to the auric force. Here is at once a source of fallacy. It is easy to produce any number of vibrations and gyrations, by suspending a weight from the finger; and it would be extremely difficult to prevent it from manifesting motion. If the movement of the suspended body was really produced by the substance placed underneath it mechanically influencing the motion, it would be very easy to make the requisite experiments with a gold ring, or a bit of sealing wax, suspended by a fixed mechanical support, independent of the human body. But no such experiments have been made—or if made, they have proved entire failures—thus demonstrating that the suspended body or odometer is not really influenced by the object over which it is suspended; and that all the movement which is really produced, is produced through the agency of the human being who is concerned, and not by means of inorganic matter. It is true that in the English experiments, the odometer was suspended from a brass rod, attached to an upright support, upon which rod the finger of the experimenter was placed. Such a contrivance would possess all the mobility necessary to put the suspended body in motion. If instead of a brass rod and wooden upright, a solid iron frame be substituted, resting on an immoveable basis, from a projecting arm of which the moving body is to be suspended, the requisite conditions would exist, but no movement would be produced. In other words, the whole of the movements which have been described as taking place, belonged to the movement of the hand and arm of the operator alone. Consequently they are proofs, not of a mysterious force acting upon dead matter, but of the influences that operate upon the living constitution of the experimenter. Hence, individuals who are highly impressible, are apt to prove successful in such experiments where those who are defective in impressibility fail.

When impressible persons hold the odometer or aura-test, over the various organs of the brain, they are themselves affected by the proximate organs, and the unconscious movements of their hands, which are imparted to the suspended body, are produced in accordance with the pathognomic laws; hence, the record of such experiments becomes interesting, simply as an illustration of the laws of muscular movements, governed by the brain; and a beautiful and decisive demonstration is produced, while the operator is unconscious of the law which he is obeying.

The influences of medicinal substances, when held by the hand, are transmitted through the nervous system, and are thus made to excite the muscular system, producing movements in accordance with their constitutional influence. Medicinal substances

which excite the basilar organs, produce basilar movements; and those which excite the anterior and coronal region of the brain, produce a corresponding class of movements. Hence, the explanation of the various movements which have been produced, requires a knowledge of those pathognomic laws which I am now developing in the Bremer correspondence. Why the results should vary according to the position of the individual, in relation to the points of the compass, appears at first inexplicable; but a clue to this mystery may be obtained by a knowledge of the relation which man bears to the globe. I would simply announce that the pathognomic laws bear a fixed relation to the points of the compass, and consequently that the various lines—north and south, east and west, and their intermediates, correspond in their character and influence with the pathognomic lines of the brain. Hence, the attitude in relation to the points of the compass must have its influence, as well as the impressions of medicinal substances, which may be swallowed or held in the hand.

As the movements of the suspended body are produced by the hand of the experimenter, it is not at all mysterious that they should appear to be governed by the influence of the will. The influence of the will, or a strong mental impression, is quite capable of producing movements, when the individual is unconscious of having called his muscles into action. The limbs of mesmeric subjects, under the control of operators who rely upon imagination and commands emphatically uttered, readily perform the movements which he suggests, even when the subject is reluctant, or makes decided attempts at resistance. The impression on the mind becomes realized in the muscles, without the consent or even knowledge of the subject. It is not strange, therefore, that the mesmeric subject should exhibit these odometric movements at the command of the operator's will, or that they should be produced unconsciously by other influences, or even by the idea the subject entertains. In short, the whole of these experiments, while they fail to develop any new laws as to the relations of mind to inorganic matter, afford a beautiful illustration of the laws of muscular movement—the delicate impressibility of the human constitution, and the relations of man to the universe.

I have repeated a few of these experiments, showing that with impressible persons they may be successfully performed, but with a sufficient degree of firmness and steadiness, no such movements occur. A detailed explanation of the movements might be given, but space forbids.

FAMILIAR TABLE TALK.

AFRICAN COLONIZATION.—The separation of the black and white races, appears to be a necessary consequence of existing circumstances. The recent convention of the colored people in Cincinnati, manifested a feeling highly favorable to emigration. Mr. J. G. Birney has published a pamphlet strongly recommending emigration to Liberia, and Gov. Hunt, of New York, uses the following language in a recent message.

"A careful examination has convinced me of the feasibility and immense advantages of the undertaking, and of its pre-eminent claims upon our support. Under the auspices of the society, nearly 10,000 free colored persons have emigrated, many of them being slaves liberated on that condition. They have established a free republican government, and acquired by peaceful means a large extent of country, embracing 200,000 people, and abounding in the elements of agricultural and commercial prosperity. They have shown themselves competent to make their own laws and administer their affairs with regularity and justice. Industry prospers, churches and schools have been established, and the people of this infant colony, carrying with them the knowledge acquired in the scene of their former humiliation, are spreading christianity and civilization over a portion of the earth which has been sunk for ages in heathen barbarism. The value of this consideration will be felt when it is remembered that the population of Africa is computed at 150,000,000, of whom a majority are in the most abject slavery. By the efforts of the new republic the slave trade has been suppressed along several hundred miles of coast, and the extension of the settlements will extirpate that detestable traffic. Thus we perceive that this great work of humanity may claim the double merit of redeeming another continent from degradation, while it improves the condition of our own. It needs no prophetic vision to foresee that one of the great designs of a mysterious providence is to be fulfilled by restoring the oppressed sons of Africa to their native soil after centuries of bondage.

"A cause so beneficent, identified with the lasting welfare of two of the great races of mankind, rises high above the party contests of the day, and appeals with resistless force to the justice and humanity of the whole American people. I hope to see it sustained by the liberal action of the national government, seconded by contributions from the several States. The employment of government steamers to transport colored emigrants from this country, would soon obviate the necessity for a naval squadron on the coast of Africa, which is now maintained there by the United States at great expense and waste of life, for the suppression of the slave traffic. It may be objected to the claims of the Colonization Society that its operations are gradual, and that the consummation of its purposes will require a long series of years. But we should reflect that it is impossible to remove an evil of such magnitude by any human means within the period allotted to a single generation. It is not to be denied that the efforts of the association have secured the liberation of several thousand slaves, a result more practical and beneficial than has been produced by other organization. Until some portion of this continent or of the West India Islands shall be set apart for the exclusive habitation of the colored race, African colonization must be regarded as the only effective auxiliary of voluntary emancipation.

"A growing desire to emigrate is manifested by the black population, and many masters have declared their readiness to free their slaves when means can be found for their removal. Some of the States have made considerable appropriations to promote the object, and an increasing interest has been evinced by others. New York ought not to be behind her neighbors in the performance of a duty so important to her own welfare, and so beneficial to a


large portion of the human family, now held in melancholy debasement. It is a work in which christians and patriots of all parties and in all sections can unite their efforts, without involving the country in political or geographical dissensions. I submit the whole subject to your enlightened consideration, in firm belief that upon a full examination of its merits you will deem it in accordance with justice and policy, and an enlightened public sentiment, to manifest your approval of the cause by a liberal appropriation for the furtherance of its benevolent designs."

Mr. W. P. CHAMPLIN writes, from Kendall Creek, Pa.

"The new science of Psychometry is creating a good deal of interest in this section of the country. My wife, a young lady mentioned in my last communication, appears to have the psychometric power developed in an ample degree. The most powerful letters that I have ever placed upon her forehead were those of yourself, and Theodore Parker, of Boston, Mass. Those letters always make a decided impression. Instances have likewise been known where a letter (has been bound on her forehead, over the intuitive region of the brain) that was written by two different individuals, of the opposite sexes; and she could even distinguish and point out the characters of each with a great degree of accuracy.

"I feel the greatest pleasure in circulating your 'Journal,' because I know that to be the only medium that upholds true anthropological science. All other publications relating to this subject sink into comparative insignificance when placed by the side of the 'Journal of Man.'"

SPIRITUAL CONVENTION.—The friends of spiritual science propose holding a convention in this city some time in May next, at which the various spiritual *mediums* in the United States may be assembled together. If it should occur, the occasion would quite interesting.

 **ECLECTIC MEDICAL INSTITUTE.**—The attention of my readers is especially invited to the new movement in the Eclectic Medical Institute, by which the expense of a thorough medical education is reduced to a mere trifle.

[See cover.]

DEATHS.—Priessnitz, the noted leader of the system of Hydropathy, died in his residence at Gräfenburg on the 28th of November, after a gradual failure from a consumptive disease of several months' continuance. He was only 52 years of age, and left a fortune supposed to amount to not less than \$500,000. —*Exchange*.

FREDRIKA BREMER arrived at Stockholm on the 22d of November last, in season to be present at the funeral of her elder sister, Miss Marie Bremer, from whom she inherits a very large fortune.—*Tribune*

A CONTEMPTIBLE MONOPOLY.—According to a recent decision of the Supreme Court, a letter cannot be carried by a boat even if it relates to the cargo, without violating the post office laws. This insolent meddling of government with private business ought not to be tolerated for one moment.

SPIRITUAL COMMUNICATIONS are more extensively diffused and actively progressing than ever. There are quite a number of good mediums in this city, among families of intelligence and respectability. In St. Louis too, there is a considerable amount of spiritual communication, while the number of places over the country where such communications are going on could scarcely be chronicled. The Misses Fox, who have been in this city during the past winter, leave for Louisville this week. I have made them one visit, during which I distinctly felt the jar of the floor from loud raps, which certainly were produced by no visible agency.